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In the 1970's the 3 domain system of classification was introduced that grouped all life forms as either archaea, bacteria, and eukaryota.

0	1	.	1
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In which of these domains will you find extremophilic bacteria? [1 mark]

Archaea [1]

0	1	.	2
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Which domain contains organisms with a true nucleus? [1 mark]

Eukaryota/eukaryote [1]

0	1	.	3
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Before the 3 domain system, all organisms were classified into the Linnaean system. Tick the box below that has the correct order for the groups in this classification system. [1 mark]

kingdom, phylum class, order, family, genus, species

species, class, genus, family, order, phylum, kingdom

kingdom, family, order, class, phylum, genus, species

0	1	.	4
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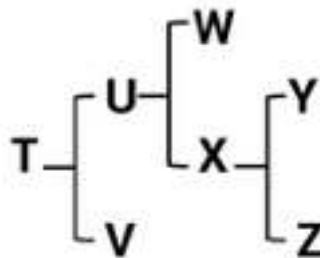
what is meant by the term binomial classification?

[2 marks]

name of 2 parts/2 names [1]

one is the genus and one is the species name [1]

Below is a diagram of an evolutionary tree. An evolutionary tree is a diagram that shows how closely related organisms are to one another.



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State two pieces of information that scientist use to construct these evolutionary trees from.

[2 marks]

any 2 from: fossil data, DNA analysis, observable similarities/physical similarities, biochemical analysis

0	1	.	6
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Using the evolutionary tree above which two species have become extinct?

[2 marks]

V [1] & W [1]

0	1	.	8
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Which species is the common ancestor for all the species in the diagram?

[1 mark]

T [1]

0	1	.	9
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Is species Y more closely related to species X or W? Explain your answer.

[2 marks]

Species X [1] as it evolved/speciated from it [1]